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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

DAVIS, BRIAN J

ART UNIT PAPER NUMBER

1621

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/823,597

Applicant(s)

SHIROTA ET AL.

Examiner

Brian J. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/22/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 5-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/237,951.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/14/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION***Election/Restriction***

Applicant's election, with traverse, of the claims of Group I (claims 1-4) as the Group elected for prosecution is acknowledged. Claims 5-9 are withdrawn from consideration.

Applicant argues that there is not more than a reasonable number of species and that no undue burden on the Office would result from a consideration of all pending claims.

The examiner is in perfect agreement with applicant up to a point, but respectfully notes, however, that contrary to applicant's assertion, the election/restriction was not based upon a burdensome-search type criteria, such as would normally arise from a claim or claims teaching a large Markush group of separate and patentably distinct chemical species. It was, instead, based upon applicant's claiming of distinct sets or classes of inventions – a synthetic method; a device; and a polymer – each of which have acquired a separate status in the technological arts. As evidence of this, as was stated in the election/restriction requirement, the three inventions are classified by the USPTO's classification system into three separate and unrelated classes: 564, 428 and 526.

The election/restriction was proper and is hereby made FINAL.

Claim Objections

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Claim 1 is objected to because of the following informalities: the claim text contains both domestic and British spellings of the word "formula" ("formulae"). The examiner respectfully suggests that a consistent use of the domestic spelling "formula" should be employed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The definitions of R¹ and R² are unclear. That is, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38

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(Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation "...a hydrogen atom, a halogen atom, an alkyl group or and alkoxy group...", and the claim also recites "...an alkyl group..." which is the narrower statement of the range/limitation.

The examiner respectfully suggests a slight rewording of the claim such that it is unambiguously clear that *at least one* of either R¹ or R² must be an alkyl group. (This suggestion is made since it does appear to be applicant's intention, despite the instant wording, and would be consistent with the prosecution history of the parent.)

The remaining claims are also rejected under 35 USC 112, second paragraph, as claims which depend from indefinite claims are also indefinite. *Ex parte Cordova*, 10 USPQ 2d 1949, 1952 (PTO Bd. App. 1989).

Allowable Subject Matter

Claims 1-4 would be allowable once the objection and rejection above have been overcome. The following is a statement of reasons for the indication of allowable subject matter:

The closest prior art appears to be *Tetrahedron Letters* (1998), Vol. 39, p. 2367-2370 and *Chem. Rev.* (1995), Vol. 95, p. 2457-2483, both cited in the IDS, which teach the palladium-catalyzed synthesis of triaryl amines from aryl halides and diaryl amines, and palladium-catalyzed cross-coupling reactions of organoboron compounds, respectively. That is, the first reference teaches the first basic step of the instant reaction and the second reference teaches the

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second step. Neither reference teaches or suggests the overall instant synthetic strategy, however. Nor is there motivation to combine the two references.

At best, it might have been obvious to try combining the synthetic strategies of the references in order to arrive at the overall strategy of the instant claims, however, an 'obvious to try' standard is impermissible in two situations: 1) where the prior art gives no indication as to which of numerous parameters are critical, or gives no indication as to which of many possible choices is likely to be successful; and 2) where the prior art gives only general guidance with respect to the form of the invention but not how to achieve it new areas of technology or in fields of experimentation which are only seemingly promising. *In re O'Farrell*, 853 F2d 894, 7 USPQ 2d 1673, 1681 (Fed. Cir. 1988). In the instant case, both 1) and 2) apply.

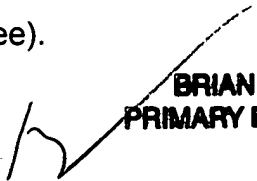
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Davis whose telephone number is 571-272-0638. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 **BRIAN DAVIS**
PRIMARY EXAMINER

Brian J. Davis
March 5, 2005